

Varela, L.R., Assessment of the Association Between Passive Smoking and Lung Cancer, Ph.D. dissertation submitted to Yale University, 1987.

Note: The Janerich, et al., (1990) paper is based on part of this otherwise unpublished study.

This large case-control study included 439 case-control pairs. Only histologically confirmed cases were included. It is one of the few studies actually designed to test the hypothesis that lung cancer risk in nonsmokers is associated with various indices of ETS exposure (e.g., spousal smoking). Cases and controls were matched by county of residence. While 33% of the interviews were with proxy respondents, cases and controls were matched on type of interview.

For spousal smoking, 73 statistical tests were run. None was statistically significant. Because of the large sample size of the study, the associated statistical power is high. For household exposure to ETS, measured in person/years, only one exposure level,  $\geq 175$  person/years had a statistically significant OR = 1.09. This is of marginal statistical significance when confounding factors are taken into account (lower CI of 1.00067). Of 27 analyses on workplace smoking, none was statistically significant. For ETS in social settings, no individual odds ratio was statistically significantly different from one, yet there was a highly significant inverse trend between ETS exposure and lung cancer risk.

20233512851